



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,539	01/16/2001	William J. Dally	2789.2010-000	5876
24319	7590	09/09/2004	EXAMINER	
LSI LOGIC CORPORATION 1621 BARBER LANE MS: D-106 LEGAL MILPITAS, CA 95035			CHANG, RICHARD	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,539

Applicant(s)

DALLY, WILLIAM J.

Examiner

Richard Chang

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 13, 14, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 2-12 and 15-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/5/29/2001
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 14 and 27 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 6,778,529 ("Field et al").

Regarding claims 1, 14 and 27, Field et al teach a synchronous switch and method for a telecommunications node wherein each 125 microsecond frame period is divided into 256 subframes (A time-slot interchanger ... input data frame) comprising of

a systems clock which is used to derive the 125 microsecond frame pulse for synchronization (a global frame clock) (See Fig. 32, Col. 32, lines 12 - 26),

the switch memory 656 where the traffic may be directly received at the switch interface 650 (an interchange random access ... at an input)

the switch interface 650 provides the ingress TDM traffic storage into the ingress RAM 670 to determine an address in the switching memory 656 (a write address generator ... received order) (See Fig. 33, Col. 32, lines 27 - 62), and

the controller 652 accesses the egress RAM 672 to determine an address in the switching memory 656 and retrieves the address containing TDM traffic to be read and the switch and line

Art Unit: 2663

cards are synchronized to this 125 microsecond frame pulse wherein a repeated schedule of RAM accesses are performed each subframe consisting of 30 egress reads followed by 30 egress writes (a read address generator ... frame clock) (See Fig. 34, Col. 32, line 63 to Col. 33, line 18).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,778,529 ("Field et al") in view of 5,303,077 ("Buttle et al").

Regarding claims 13 and 26, in the previous action item 2, Field et al teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of

"at least one switch of at least one stage comprising a time-slot interchanger".

Buttle et al teach an Optical switch and switching module therefor wherein block 17 in dashed lines enclosing the time slot interchangers and the space switch 13 to indicate such a functional unit (at least one switch of at least one stage comprising a time-slot interchanger); (See Fig. 1, Col 5, lines 30- 52).

A person of ordinary skill in the art would have been motivated to employ Buttle et al in Field et al in order to obtain a time slot interchanger and to take advantage of the

Art Unit: 2663

time slot interchangers and the space switch capable of the subframe interchange in claims 13 and 26.

The suggestion/motivation to do so would have been to accommodate a multi-stage digital cross connect switch and to take advantage of the time slot interchangers and the space switch capable of the subframe interchange in claims 13 and 26. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Buttle et al with Field et al to obtain the inventions specified in claims 13 and 26.

Allowable Subject Matter

5. Claims 2-12 and 15-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if no art rejection can be applied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is 703-605-4398. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RKC
rkc

Richard Chang
Patent Examiner
Art Unit 2663



KENNETH VANDERPUYE
PRIMARY EXAMINER